

ADDITIONAL MATERIALS TOWARD A MONOGRAPH OF THE GENUS
CALLICARPA. XXI

Harold N. Moldenke

CALLICARPA L.

Emended synonymy: Cellicarpa Hansford, *Sydowia Ann. Myc.*, ser. 2, Beih. 2: 685, sphalm. 1961. Sphondylococcum Schau. ex Airy Shaw in J. C. Willis, *Dict. Flow. Pl.*, ed. 7, 1059, in syn. 1966.

Additional & emended bibliography: [Retz.], *Nom. Bot.* 35 & 282. 1772; W. Jones, *Asiat. Research.* 2: 255--256. 1799; Gaertn., *Mey.*, & Scherb., *Fl. Wettst.* 2: 443. 1800; Wall., *Numer. List* 87. 1831; Voigt Hort. Suburb. Calc. 464, 467, & 473. 1845; Speg., *Anal. Soc. Cient. Argent.* 12: 41. 1881; Solered., *Syst. Anat. Dicot.* 712, 714, & 715. 1899; E. D. Merr., *Philip. Bur. Govt. Lab. Bull.* 29: 47--48 & 58. 1905; Durand & Jacks., *Ind. Kew. Suppl.* 1, pr. 1, 471 & 480. 1906; Syd., *Ann. Mycol.* 10: 80. 1912; Syd., *Leafl. Philip. Bot.* 6: 1926. 1913; Syd., *Ann. Mycol.* 15: 195. 1917; Hubert, *Verb. Utl. Mat. Med.* 65. 1921; S. Moore, *Journ. Bot. Lond.* 63: *Suppl.* 80. 1925; Stevens, *Ann. Mycol. Berlin* 25: 468. 1927; Stevens & Rold., *Philip. Journ. Sci.* 56: 53. 1935; Tharp, *Veg. Tex.* 67. 1939; Yamamoto, *Trans. Nat. Hist. Soc. Formosa* 31: 15 & 226. 1941; Durand & Jacks., *Ind. Kew. Suppl.* 1, pr. 2, 471 & 480. 1941; Lam & Meeuse in *Holthuis & Lam, Blumea* 5: 235. 1942; Anon., *Blumea* 5: 767. 1945; Wyman, *Shrubs & Vines Am. Gard.* 113--114 & 415. 1956; Hansford, *Sydowia* 10: 47 & 51. 1957; Viertel, *Trees Shrubs & Vines nos.* 550 & 551. 1959; Durand & Jacks., *Ind. Kew. Suppl.* 1, pr. 3, 471 & 480. 1959; Hansford, *Sydowia Ann. Myc.*, ser. 2, Beih. 2: 685, 686, 688, 689, 691, 692, & 695. 1961; C. E. Lewis in *Florists Publ. Co., New Pronounc. Dict. Pl. Names* 13. 1964; R. E. & C. R. Harrison, *Trees & Shrubs* 39, pl. 93. 1965; J. & L. Bush-Brown, *Am. Gard. Book*, ed. 4, 269. 1965; Airy Shaw in J. C. Willis, *Dict. Flow. Pl.*, ed. 7, 29, 51, 166, 177, 179, 576, 590, 913, 975, 1059, 1062, 1129, & 1176. 1966; Uniyal & Issar, *Journ. Res. Indian Med.* 4 (1): 8385. 1969; Coats, *Pl. Hunters* 101 & 271. 1969; J. V. Watkins, *Fla. Landsc. Pl.* 308, 362, & dust-jacket. 1969; DuMond, *Catanea* 35: 212 & 213. 1970; Furia, *Biol. Abstr.* 51: 11432. 1970; Hocking, *Excerpt. Bot.* 15A: 421. 1970; Mc Gourty [editor], *1200 Trees [Plants & Gard.* 26 (2):] 55. 1970; Gibson, *Fieldiana Bot.* 24 (9): 179 & 182--183, fig. 34. 1970; Moldenke, *Biol. Abstr.* 52: 5925 & 5926. 1971; Anon., *Biol. Abstr.* 52 (11): B.A.S.I.C. S.35 (1971), 52 (13): B.A.S.I.C. S.33 (1971), and 52 (15): B.A.S.I.C. S.34. 1971; Farnsworth, *Pharmacog. Titles* 5, *Cumul. Gen. Ind. sub Callicarpa* (1971), 6 (6): iv & F.11032 (1971), and 7 (7): iii & title 12973. 1971; Farnsworth, *Lynn Ind.* 7: 228. 1971; Westcott, *Pl. Disease Handb.*, ed. 3, 511. 1971; Moldenke, *Biol. Abstr.* 52: 8221. 1971; Moldenke, *Phytologia* 21: 504, 506, 508, & 512 (1971) and 22: 7--28 & 131--136. 1971; Nishino & al., *Tetraedron Lett.* 1971 (19): 421--424. 1971.

It should be noted that the "Callicarpe" Roxb. ex W. Griff.,

Notul. Pl. Asiat. 4: 173 (1854), illustrated in his Icones pl. 447 (1854), appears to be a Geunsia since it has 5 stamens.

It would seem that the genus Rodschiedia Dennst. is much better placed as a synonym of Croton L., in the Euphorbiaceae, than as a synonym of Callicarpa, as pointed out by me in a previous installment of these notes.

Crevoist & Pételot (1934) describe an unidentified species of Callicarpa as "Plante herbacée de 60 cm à 1 m, assez fréquente au Tonkin et vendue en sex chez les herboristes. Les feuilles servent à préparer une décoction contre la jaunisse qui survient chez les femmes après l'accouchement. Cette décoction passe pour favoriser la miction." They record the vernacular name "corn chay" for the plant but note that "Ne point confondre cette plante avec Sambucus Javanica, des Caprifoliacées, que l'on désigne sous la même appellation vernaculaire."

Westcott (1971) records the following fungi as attacking members of this genus [probably mostly C. americana]: black mildew (Meliola cookeana) in Florida and Louisiana and leaf-spot (Cercospora callicarpae) from South Carolina to Texas, as well as the worm, burrowing nematode (Radopholus similis) in Florida.

CALLICARPA ACULEOLATA Schau.

Additional bibliography: Hocking, Excerpt. Bot. 15 A: 421. 1970; Moldenke, Biol. Abstr. 52: 5925. 1971; Moldenke, Phytologia 20: 487 (1971) and 22: 14. 1971.

CALLICARPA ACUMINATA H.B.K.

Additional bibliography: Gibson, Fieldiana Bot. 24 (9): 182—183, fig. 34. 1970; Moldenke, Biol. Abstr. 52: 8221. 1971; Anon., Biol. Abstr. 52 (15): B.A.S.I.C. S.34. 1971; Moldenke, Phytologia 21: 444, 466, 467, & 500 (1971) and 22: 22. 1971.

Additional illustrations: Gibson, Fieldiana Bot. 24 (9): 183, fig. 34. 1970.

Ortiz describes this plant as having a stem 15 cm. in diameter. The vernacular names, "cenciento", "fruta de chacha", and "xpucyim", have been recorded for it. I have re-examined the University of Michigan specimen of J. Rzedowski 10689a and still feel that it is best identified as C. pringlei Briq., even though other specimens distributed under this same number have been cited as C. acuminata by me. The Andersons found the plant in fruit in March.

Additional citations: MEXICO: Jalisco: Anderson & Anderson 6041 (Mi). Tamaulipas: Sharp 50-5011 (N). GUATEMALA: El Petén: Ortiz 1319 (N).

CALLICARPA ACUTIDENS Schau.

Additional bibliography: Moldenke, Phytologia 20: 489 (1971) and 21: 452. 1971.

CALLICARPA AMERICANA L.

Additional bibliography: [Retz.], Nom. Bot. 35. 1772; W. Jones, Asiat. Research. 4: 256. 1799; Speg., Anal. Soc. Cient. Argent. 12: 41. 1881; Solered., Syst. Anat. Dicot. 712 & 714. 1899; Tharp, Veg. Tex. 67. 1939; Wyman, Shrubs & Vines Am. Gard. 415. 1956; Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 695. 1961; J. V. Watkins, Fl. Landsc. Pl. 308, 362, & dust-jacket. 1969; Coats, Pl. Hunters 271. 1969; DuMond, Castanea 35: 212 & 213. 1970; Moldenke, Biol. Abstr. 52: 5925. 1971; Moldenke, Phytologia 21: 444, 452, 465, & 466. 1971.

Additional illustrations: J. V. Watkins, Fla. Landsc. Pl. 303 [in color] & dust-jacket [in color]. 1969.

Jones (1799) refers to this species as "American callicarpus". Crevost & Pételot (1934) record a "Callicarpa americana, Lin.", with the vernacular name of "nang nang" in Indochina, saying "Plante arbustive importée de l'Amérique du Sud, signalée par Loureiro en Cochinchine; arbrisseau d'ornement dont les feuilles passent, dans son pays d'origine, pour être dépuratives." It is very probable that C. candicans (Burm. f.) Hochr. is the plant being referred to here, since that is the one Loureiro apparently had in mind.

Tharp (1939) reports that in Texas C. americana is to be found in longleaf pine, coastal prairie, Edwards Plateau, oak-hickory, and pine-oak regions. DuMond (1970) describes it as common in the coastal plain area but uncommon in the piedmont. He observed it in the upper altitudinal limits of the Southeast Blue Ridge Escarpment.

Hansford (1961) asserts that the fungus, Meliola cookeana Speg., is based on Ravenel 84 from Florida as type.

Additional citations: NORTH CAROLINA: Carteret Co.: Blomquist 17031 (Mi).

CALLICARPA AMERICANA var. LACTEA F. J. Muller

Additional bibliography: Wyman, Shrubs & Vines Am. Gard. 415. 1956; Moldenke, Phytologia 21: 150. 1971.

CALLICARPA AMPLA Schau.

Additional bibliography: Moldenke, Phytologia 20: 493 (1971) and 21: 476. 1971.

CALLICARPA ANGUSTA Schau.

Additional bibliography: Moldenke, Phytologia 21: 329--330, 460, 478, & 479 (1971) and 22: 20. 1971.

CALLICARPA ANGUSTIFOLIA King & Gamble

Additional bibliography: Moldenke, Phytologia 21: 444 & 465. 1971.

CALLICARPA ARBOREA Roxb.

Additional & emended bibliography: Voigt, Hort. Suburb. Calc. 467. 1845; S. Moore, Journ. Bot. Lond. 63: Suppl. 80. 1925; Mol-

denke, Phytologia 21: 444--445 & 449 (1971) and 22: 27 & 28. 1971.

Voigt (1845) records this species as cultivated in India.

Thanks to the kindness of Miss Mary Liu, I am now able to report the Chinese-character citations for this species given by Chang (1961). They are: Kwangsi: Herb. Kwangsi Mus. 5231; S. P. Kao 55169; S. J. Liang 65995. Yunnan: H. T. Tsai 60404, 60846, 61029, & 61166.

CALLICARPA ARBOREA var. PSILOCALYX (H. J. Lam) Moldenke

Additional synonymy: Callicarpa magna Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 685, sphalm. 1961.

Additional bibliography: Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 685. 1961; Moldenke, Phytologia 21: 445 & 449 (1971) and 22: 28. 1971.

Hansford (1961) says that the fungus, Asteridiella callicarpae (Stev. & Rold.) Hansf., grows on this host in the Philippine Islands. The record is based on Stevens 1291 & 1468.

CALLICARPA BARBATA Ridl.

Additional bibliography: Moldenke, Phytologia 20: 495 (1971) and 21: 39, 40, & 494 (1971) and 22: 23. 1971.

CALLICARPA BICOLOR A. L. Juss.

Additional bibliography: Moldenke, Phytologia 21: 330--331 & 340 (1971) and 22: 19. 1971.

CALLICARPA BODINIERI Léveillé

Additional bibliography: Moldenke, Phytologia 21: 445, 469, & 488. 1971.

Thanks to the kindness of Miss Mary Liu, I am now able to report the Chinese-character citations given by Chang (1951) for this species. They are: Chekiang: Herb. Cent. Univ. Chekiang 45459. Hunan: H. D. Chang 447 & 4570; S. C. Chen 1112; K. C. Ho 847, 1301, & 1338; S. C. Hsin 22; L. J. Li 159; P. H. Liang 83645. Kiangsi: E. Chiang 10081 & 10342. Kwangsi: C. H. Chung 81789; Ho, Huang, & Cha 130327; C. L. Teng 13530; H. T. Tseng 27740, 27835, 27963, & 28380. Kwangtung: S. C. Chen 1352, 2258, & 5596; C. L. Tso 22634. Kweichow: S. C. Hsin 50269, 50734, 51236, & 52017.

CALLICARPA BODINIERI var. GIRALDII (Hesse) Rehd.

Additional bibliography: Moldenke, Phytologia 21: 445, 469, 488, 491, & 492 (1971) and 22: 14. 1971.

Again, thanks to the kindness of Miss Mary Liu, I can now report the Chinese-character citations for this variety given by Chang (1951) as: Anhwei: J. C. Chin 2761, 2990, & 3204. Chekiang: W. T. Cheng 682; J. C. Chin 165; Herb. Chekiang Cent. Univ. 43372. Fu-kien: C. L. Chen 116. Hunan: K. C. Ho 1887; S. C. Hsin 23. Hupeh: Herb. Hupeh Cent. Univ. 101357. Kiangsu: C. L. Tso 598. Kwangsi: J. H. Chin 5265 & 6394; C. Huang 40920; C. L. Teng 13273. Kwang-

tung: H. T. Tseng 20717. Kweichow: E. Chiang 5453; H. M. Mou 223. Sikiang: K. L. Tsui 4082. Szechuan: S. F. Chan 914 & 923; Y. Chen 7653; W. P. Fang 4648, 5719, 7918, 8402, 10115, 15711, & 18036; K. L. Tsui 1963. Yünnan: E. Chiang 12095, 12180, & 12836; H. T. Tsai 5221, 58931, & 59184.

CALLICARPA BODINIERI var. *LYU* (Léveillé) Rehd.

Additional bibliography: Moldenke, *Phytologia* 20: 497—498. 1971.

The Chinese-character citations given by Chang (1961) for this variety, thanks to the translation of Miss Mary Liu, are as follows: Hunan: H. T. Chang 3385; C. T. Chen 162; H. C. Chen 3388 & 3415; K. C. Ho 1012 & 1531; P. C. Yeh 179. Szechuan: W. P. Fang 1235.

CALLICARPA BODINIERI var. *ROSTHORNII* (Diels) Rehd.

Additional bibliography: Moldenke, *Phytologia* 20: 498. 1971.

The Chinese-character citation for this variety given by Chang (1951) is W. P. Fang 10129.

CALLICARPA BREVIPES (Benth.) Hance

Additional bibliography: Moldenke, *Phytologia* 21: 445—446, 458, & 490 (1971) and 22: 27. 1971.

Thanks to the kindness of Miss Mary Liu, I can now report the Chinese-character citations for this species given by Chang (1951) as: CHINA: Kwangsi: S. K. Li 81075. Kwangtung: S. L. Chang 151; H. Y. Chen 6803 & 8626; L. S. Chen 41191; W. Chen 9901; C. Huang 31032 & 38085; H. T. Tseng 25123 & 28853; C. L. Tso 20166, 21643, 21713, 22495, & 22579. HONGKONG: K. C. Huh 74230. CHINESE COASTAL ISLANDS: Hainan: C. Huang 33985 & 36848; K. C. Huh 72825; T. J. Liang 62467 & 64235; H. H. Liu 27262.

CALLICARPA BREVIPES var. *DENTOSA* Chang

Additional bibliography: Moldenke, *Phytologia* 20: 498—499. 1971.

According to Miss Mary Liu, the name of the collector of the type specimen on which this variety is based is incorrectly transliterated by Chang (1951) and should be Huang 30715b.

CALLICARPA BREVIPES f. *SERRULATA* P'ei

Additional bibliography: Moldenke, *Phytologia* 20: 499 (1971) and 21: 213. 1971.

CALLICARPA BREVIPETIOLATA Merr.

Additional bibliography: Moldenke, *Phytologia* 20: 499 (1971) and 21: 453, 484, & 488. 1971.

CALLICARPA CANDICANS (Burm. f.) Hochr.

Additional synonymy: *Callicarpa cana foliis serratis subtus tomentosus* L. ex Retz., Obs. Bot. 5: 1. 1789. *Callicarpa heynei* Roth

ex C. B. Clarke in Hook. f., Fl. Brit. India 4: 569, in syn. 1885.

Additional & emended bibliography: [Retz.], Nom. Bot. 35. 1772; W. Jones, Asiat. Research. 4: 256. 1799; Voigt, Hort. Suburb. Calc. 467 & 473. 1845; C. B. Clarke in Hook. f., Fl. Brit. India 4: 568—569. 1885; Syd., Ann. Mycol. 10: 80. 1912; S. Moore, Journ. Bot. Lond. 63: Suppl. 80. 1925; Lam & Meeuse in Holthuis & Lam, Blumea 5: 235. 1942; Holthuis & Lam, Blumea 5: 112 & 118. 1942; H. J. Lam, Blumea 5: 767. 1945; Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 689, 691, & 695. 1961; Moldenke, Biol. Abstr. 52: 5925 & 5926. 1971; Moldenke, Phytologia 21: 446, 449, 451, 453, 465, & 466 (1971) and 22: 19, 22, 27, & 28. 1971.

Voigt (1845) reports this species cultivated in India. Holthuis & Lam (1942) record it from Miangas island in the Talauds, and Jones (1799) refers to it as the "hoary callicarpus".

Crevost & Pételot (1934) record the vernacular names, "nang nang", "ou nga", and "sroul kraham" for this species and note that the "Directeur du Jardin Botanique de Saigon, nous a signalé que l'espèce, bien connue des Cochinchinois, leur fournit des feuilles, des tiges et des racines qui, préparées en décoction, sont absorbées par les femmes après l'accouchement pour reprendre l'appétit." Hubert (1921) says, under the name C. rheedii Kostel., "Cette plante sert, dans l'Indie, au traitement des maladies des poumons et du foie". The "Callicarpa americana, Lin." of Crevost & Pételot (1934), being based on Loureiro's record, doubtless refers to C. candicans, rather than to the true C. americana L. of the New World.

Thanks to the kindness of Miss Mary Liu, I am now able to report the Chinese-character citations for this species given by Chang (1951) as: CHINA: Kwangtung: E. Chiang 873. CHINESE COASTAL ISLANDS: Hainan: H. T. Chang 4049; C. Huang 33351; K. C. Huh 71432 & 72432; H. J. Liang 61557, 61931, 64567, 65228, & 66541; H. C. Liu 139, 1026, 3379, 4837, 5975, 26009, & 27239; H. T. Tseng 315.

Hansford (1961) records the fungus, Asteridiella vilis (Syd.) Hansf., from this host plant in the Philippine Islands, based on Clemens 6367 and Stevens 537, 1692, 1696, & 1698, the fungus, Meliola callicarpae Syd., also from this host plant in the Philippines, based on Philip. Bur. Sci. 7421, as well as 24031 & 27794, Clemens 6367, and Stevens 225, 506, 515, 976, 508, & 1683, and Meliola cookeana Speg. from this host in the Philippines, based on Baker 481 & 1813 and Stevens 537, 619, 971, & 1696.

CALLICARPA CANDICANS var. SUMATRANA (Miq.) Moldenke

Additional bibliography: Moldenke, Phytologia 21: 151--152 & 156. 1971.

CALLICARPA CAUDATA Maxim.

Additional bibliography: Moldenke, Phytologia 21: 332--334, 382, 451, 452, 454, 460, 488, & 500 (1971) and 22: 15, 16, & 23. 1971.

C. B. Robinson 299 bears printed labels which read "Representing Mamanira alba" of "Rumphius Herbarium Amboinense Vol. IV p. 124, t. 59". Rumphius' name, however, is regarded by me as applying to C. longifolia Lam.

Additional citations: MOLUCCA ISLANDS: Amboina: C. B. Robinson 299 (W--654617, W--1294194).

CALLICARPA CAULIFLORA Merr.

Additional bibliography: Moldenke, Phytologia 21: 332 & 470. 1971.

Ebalo describes this plant as a shrub, 3 m. tall, the stems 4 cm. in diameter, and the corollas violet, flowering in December. He records the vernacular name "limayap".

Additional citations: PHILIPPINE ISLANDS: Mindanao: Ebalo 792 (N).

CALLICARPA COJA Hamilt. ex Wall., Numer. List 87, hyponym. 1831.

Bibliography: Wall., Numer. List 87. 1831.

This binomial, not listed in the "Index Kewensis" nor in the "Flora of British India", is based on a Hamilton collection from Gualpara, Assam [Herb. Wallich 1826 K], was apparently considered by Wallich as a synonym of what we now call C. tomentosa (L.) Murr. and I see no reason to doubt his disposition of it.

CALLICARPA COLLINA Diels

Additional bibliography: Moldenke, Phytologia 21: 33 (1971) and 22: 27. 1971.

According to Miss Mary Liu, the Chinese-character citations for this species given by Chang (1951) are: Kiangsi: S. L. Hu 1250. Kwangtung: C. Huang 2902; S. P. Kao 52981; L. Teng 145.

CALLICARPA CRASSINERVIS Urb.

Additional bibliography: Moldenke, Phytologia 16: 363 & 452. 1968.

CALLICARPA CUBENSIS Urb.

Additional bibliography: Moldenke, Phytologia 21: 332--333, 476, 477, & 496 (1971) and 22: 14. 1971.

CALLICARPA CUBENSIS var. PARVIFLORA Moldenke

Additional bibliography: Moldenke, Phytologia 21: 332--333 & 496. 1971.

CALLICARPA CUNEIFOLIA Britton & P. Wils.

Additional bibliography: Moldenke, Phytologia 15: 20 (1967) and 21: 340. 1971.

CALLICARPA DICHOTOMA (Lour.) K. Koch

Additional bibliography: Voigt, Hort. Suburb. Calc. 467. 1845; Wyman, Shrubs & Vines Am. Gard. 415. 1956; Viertel, Trees Shrubs & Vines no. 550. 1959; R. E. & C. R. Harrison, Trees & Shrubs 39.

1965; J. & L. Bush-Brown, Am. Gard. Book, ed. 4, 269. 1965; Mc Gourty [editor], 1200 Trees [Plants & Gard. 26 (2):] 55. 1970; Moldenke, Phytologia 21: 446, 458, 459, 467, 472, 473, 480, 482—484, 486—488, & 497 (1971) and 22: 14, 22, & 26. 1971.

Additional illustrations: Viertel, Trees Shrubs & Vines no. 550. 1959.

Voigt (1845) records this species as being cultivated in India.

Thanks to the kindness of Miss Mary Liu, I can now report the Chinese-character citations given for this species by Chang (1951) as: Anhwei: J. C. Chin 2766. Chekiang: Herb. Chekiang Cent. Univ. 44032 & 105193. Fukien: S. H. Chung 4012; Y. Lin 2749. Hunan: H. T. Chang 4541 & 4546; H. C. Ho 1243; P. H. Liang 83642; C. C. Tung 112 & 251. Kiangsi: W. Chiang 9882; S. L. Hu 6394; S. C. Liu 4521; H. M. Mo 20951. Kiangsu: Herb. Kiangsu Cent. Univ. 74885; E. L. Keng 2491; C. L. Tso 815. Kwangsi: J. C. Chin 5201; C. S. Chung 84702; Herb. Kwangsi Mus. 682; Ho, Huang, & Chia 130045; S. C. Hsin 589, 1791, & 8269; Kwangsi Cent. Herb. 96330; S. J. Liang 67086, 67139, & 67155; C. L. Teng 13523; H. T. Tseng 22939 & 23862; C. Y. Wang 5127. Kwangtung: H. Y. Chen 7217 & 7260; L. H. Chen 7778 & 42071; Herb. Lingnan Univ. 1197; C. Huang 30621 & 32487; Y. Li 10653; S. J. Liang & C. Huang 31464; S. P. Kao 52729 & 53808; S. C. Liu 2498, 24679, & 24682; L. Teng 9709; C. L. Tso 20407, 21075, & 21911.

CALLICARPA DOLICHOPHYLLA Merr.

Additional bibliography: Moldenke, Phytologia 21: 333 & 459 (1971) and 22: 16. 1971.

CALLICARPA ELEGANS Hayek

Additional bibliography: Moldenke, Phytologia 21: 152, 236, 454, 459, & 472. 1971.

CALLICARPA ERIOCLONA Schau.

Additional synonymy: Callicarpa ereoclona Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 689, sphalm. 1961. Callicarpa oreoclona Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 695, sphalm. 1961.

Additional bibliography: Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 689 & 695. 1961; Moldenke, Phytologia 21: 333, 464, 478, & 493 (1971) and 22: 16—18. 1971.

Hansford (1961) records the fungi, Asteridiella vilis (Syd.)

Hansf. [Meliola vilis Syd., Irene vilis Syd., Irenina vilis (Syd.) Stev.] from the Philippine Islands on this host, based on Stevens 123 & 823, and Meliola cookeana Speg., also from the Philippines, based on Stevens 823.

CALLICARPA ERIOCLONA var. PAUCINERVIA (Merr.) Moldenke

Additional bibliography: Moldenke, Phytologia 21: 152 & 385. 1971.

CALLICARPA FERRUGINEA Sw.

Additional bibliography: Voigt, Hort. Suburb. Calc. 473. 1845; Moldenke, Phytologia 21: 333 & 475. 1971.

CALLICARPA FORMOSANA Rolfe

Additional synonymy: Callicarpa formosensis Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 686, sphalm. 1961.

Additional bibliography: Syd., Leafl. Philip. Bot. 6: 1926. 1913; Syd., Ann. Mycol. 15: 195. 1917; Stevens, Ann. Mycol. Berlin 25: 468. 1927; Yamamoto, Trans. Nat. Hist. Soc. Formosa 31: 15 & 226. 1941; Hansford, Sydowia 10: 51. 1957; Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 686, 688--689, & 691. 1961; Moldenke, Phytologia 21: 375--376, 378, 452--454, 459, 465, 466, 488, & 492 (1971) and 22: 14 & 16. 1971.

Yamamoto (1941) records the fungi, Irene formosensis Yamam. [Asteridiella formosensis (Yamam.) Hansf.] and Meliola callicarpicola Yamam., from this host in Formosa, based on Yamamoto s.n., while Hansford (1961) records the fungus, Asteridiella vilis (Syd.) Hansf. [Meliola vilis Syd., Irene vilis Syd., Irenina vilis (Syd.) Stev.] from this host in the Philippine Islands, based on Philip. Bur. Sci. 13442, 14557, 18470, 23999, 24056, 25326, & 26756 and Baker 257.

CALLICARPA FORMOSANA f. ALBIFLORA Yamamoto

Additional bibliography: Moldenke, Phytologia 16: 365 (1968) and 21: 492. 1971.

CALLICARPA FORMOSANA f. ANGUSTATA Moldenke

Additional bibliography: Moldenke, Phytologia 21: 332, 334, & 454 (1971) and 22: 16. 1971.

CALLICARPA FORMOSANA var. GLABRESCENS Moldenke

Additional bibliography: Moldenke, Phytologia 21: 334, 454, & 459. 1971.

CALLICARPA FULVA A. Rich.

Additional bibliography: Moldenke, Phytologia 21: 446 & 475 (1971) and 22: 14. 1971.

CALLICARPA FULVA var. GLABRESCENS Moldenke

Additional bibliography: Moldenke, Phytologia 14: 232--234 (1967) and 21: 475. 1971.

CALLICARPA FULVOHIRSUTA Merr.

Additional bibliography: Moldenke, Phytologia 21: 446 & 494 (1971) and 22: 23. 1971.

CALLICARPA GLABRA Koidz.

Additional bibliography: Moldenke, Phytologia 21: 39 (1971) and 22: 21 & 22. 1971.

CALLICARPA GONGALO Hamilt. ex Wall., Numer. List 87, hyponym.
1831.

Bibliography: Wall., Numer. List 87. 1831.

This binomial is not listed in the "Index Kewensis" nor in the "Flora of British India. It is based on a Hamilton collection from the Morung Hills in eastern Nepal [Herb. Wallich 1826 J] and was apparently considered by Wallich to be a synonym of what is now known as C. tomentosa (L.) Murr. I see no reason to doubt this disposition.

CALLICARPA GRISEBACHII Urb.

Additional bibliography: Moldenke, Phytologia 15: 26. 1967; J. A. Clark, Card Ind. Gen. Sp. Var. n.d.

CALLICARPA HAVILANDII (King & Gamble) H. J. Lam

Additional bibliography: Moldenke, Phytologia 20: 495 (1971) and 21: 39--40, 493, & 494 (1971) and 22: 23. 1971.

CALLICARPA INTEGERRIMA Champ.

Additional bibliography: Moldenke, Phytologia 21: 446 (1971) and 22: 14, 27, & 28. 1971.

According to Miss Mary Liu, the Chinese-character citations given for this species by Chang (1951) are: CHINA: Fukien: Y. Lin 2416. Kwangsi: J. C. Chin 8034; S. C. Hsin 310; C. Y. Wang 5005. Kwangtung: L. S. Chen 42751; E. H. Tang 802; H. T. Tseng 21107, 21650, & 25441. HONGKONG: C. L. Tso 21799.

CALLICARPA INVOLUCRATA Merr.

Additional bibliography: Moldenke, Phytologia 20: 495 (1971) and 21: 39, 40, & 494. 1971.

CALLICARPA JAPONICA Thunb.

Additional & emended bibliography: Wyman, Shrubs & Vines Am. Gard. 113--114 & 415. 1956; Viertel, Trees Shrubs & Vines no. 551. 1959; J. & L. Bush-Brown, Am. Gard. Book, ed. 4, 269. 1965; Coats, Pl. Hunters 101. 1969; McGurty [editor], 1200 Trees [Plants & Gard. 26 (2):] 55. 1970; Furia, Biol. Abstr. 51: 11432. 1970; Moldenke, Phytologia 21: 446, 453, 459, 465, 466, 472, 480, 483, & 497--500 (1971) and 22: 14 & 26. 1971.

Additional illustrations: Viertel, Trees Shrubs & Vines no. 551. 1959.

Crevost & Pételot (1934) record the Chinese name, "tú chàu", for this species and comment that the plant is an "Arbrisseau de la Chine et du Japon, dont le bois est utilisé pour faire des baguettes à manger." Koyama describes it as a large shrub, growing in mixed woods, the corollas purplish-pink and the fruit rose.

According to Miss Mary Liu, the Chinese-character citations given by Chang (1951) for this species are: Hunan: S. C. Chen 3303; K. L. Ho 1631. Kiangsi: E. Chiang 10054. Shantung: C. Y. Chia 2617.

Additional citations: JAPAN: Kyushu: Koyama 7089 (N, N).

CALLICARPA JAPONICA f. ALBIBACCA Hara

Additional synonymy: Callicarpa japonica 'Leucocarpa' McGourty [editor], 1200 Trees [Plants & Gard. 26 (2):] 55. 1970.

Additional bibliography: Wyman, Shrubs & Vines Am. Gard. 415. 1956; McGourty [editor], 1200 Trees [Plants & Gard. 26 (2):] 55. 1970; Moldenke, Phytologia 21: 43. 1971.

According to McGourty (1970) this plant grows to a height of 5 feet or more, has small but abundant white fruit (misnamed "berries" by him) which persist even in autumn, and is one of the best shrubs with white fruit for cultivation in temperate regions.

CALLICARPA JAPONICA var. ANGUSTATA Rehd.

Additional synonymy: Callicarpa japonica angustata Coats, Pl. Hunters 101, sphalm. 1969.

Additional bibliography: Wyman, Shrubs & Vines Am. Gard. 415. 1956; Coats, Pl. Hunters 101. 1969; Moldenke, Phytologia 21: 446--447 & 472. 1971.

CALLICARPA JAPONICA var. LUXURIANS Rehd.

Additional bibliography: Moldenke, Phytologia 21: 447, 480, 483, & 497 (1971) and 22: 26. 1971.

CALLICARPA JAPONICA var. RHOMBIFOLIA H. J. Lam

Additional bibliography: Moldenke, Phytologia 20: 496 (1971) and 21: 35, 46, 242, & 499. 1971.

CALLICARPA JAPONICA var. TAQUETII (Léveillé) Nakai

Additional bibliography: Moldenke, Phytologia 21: 34 & 46. 1971.

CALLICARPA KOCHIANA Mak.

Additional bibliography: Hocking, Excerpt. Bot. 15A: 421. 1970; Moldenke, Phytologia 21: 447 (1971) and 22: 27. 1971.

Thanks to the kindness of Miss Mary Liu, I am now able to report the Chinese-character citations given by Chang (1951) for this species. They are: CHINA: Fukien: P. C. Chung 317; S. S. Chung 2350; S. K. Tang 252, 434, & 658. Hunan: P. H. Liang 86212. Kiangsi: C. Chiang 9999; S. C. Liu 4020 & 4456. Kwangtung: L. S. Chen 40488 & 41202; S. C. Chen 1639; E. Chiang 1622 & 11049; C. S. Chung 10780; T. Chung 168; H. T. Ho 60088; S. P. Kao 50049; S. J. Liang 60383; Liang & Huang 31600; S. C. Liu 815; T. H. Hsu 146; E. H. Tang 315, 989, 1059, & 1507; H. T. Tseng 21167, 21573, 21889, 25393, & 25807; C. L. Tso 20436. HONGKONG: H. Y. Chen 4993 & 5870; E. Chiang 609, 2987, 3174, & 32434; H. T. Tseng 16581.

CALLICARPA KWANGTUNGENSIS Chun

Additional bibliography: Moldenke, Phytologia 21: 43 & 47. 1971.

CALLICARPA LOBO-APICULATA Metc.

Additional bibliography: Hocking, Excerpt. Bot. 15A: 421. 1970; Moldenke, Phytologia 21: 47--48, 225, & 345. 1971.

According to Miss Mary Liu, the Chinese-character citations given by Chang (1951) for this species are: CHINA: Hunan: S. C. Chen 2673; Chen, Chu, & Chang 10189. Kwangsi: Herb. Kwangsi Mus. 752; S. C. Hsin 728; S. H. Hsin 2997, 21307, & 22393; C. Huang 40427; Kwangsi Cent. Herb. 96334; H. T. Tseng 22610 & 22779. Kwangtung: S. C. Chen 5519 & 5667; Kwangtung Cent. Herb. 75377. Kweichow: E. Chiang 6371. CHINESE COASTAL ISLANDS: Hainan: K. C. Huh 73173.

CALLICARPA LONGIFOLIA Lam.

Additional synonymy: Callicarpa lanceolaria var. subglabrata Schau. ex C. B. Clarke in Hook. f., Fl. Brit. India 4: 570, in syn. 1885.

Additional bibliography: Wall., Numer. List 87. 1831; Voigt, Hort. Suburb. Calc. 473. 1845; Solered., Syst. Anat. Dicot. 715. 1899; Hansford, Sydowia Ann. Myc., ser. 2, Beih. 2: 688. 1961; Moldenke, Biol. Abstr. 52: 5926. 1971; Moldenke, Phytologia 21: 445--447, 449, 451--454, 457, 461, 465, 466, 468, 469, 472, 473, 480, 483, & 488 (1971) and 22: 23 & 25--28. 1971; Anon., Biol. Abstr. 52 (13): B.A.S.I.C. S.33. 1971.

Hansford (1961) records the fungus, Asteridiella callista (Rehm) Hansf. [Meliola callista Rehm, Irenina callista (Rehm.) Hansf.] from this host in Java, based on Herb. Buitenzorg 12106.

According to Miss Mary Liu, the Chinese-character citations given by Chang (1951) for this species are: CHINA: Yunnan: H. T. Tsai 60928, 61204, 61314, & 61385. CHINESE COASTAL ISLANDS: Hainan: L. S. Chen 43543; E. Huang 35399 & 35683; K. C. Huh 72820; S. J. Liang 64465 & 66542; S. C. Liu 25599.

CALLICARPA LONGIFOLIA f. FLOCCOSA Schau.

Additional bibliography: Voigt, Hort. Suburb. Calc. 467. 1845; Moldenke, Phytologia 21: 447, 473, & 488. 1971; Anon., Biol. Abstr. 52 (13): B.A.S.I.C. S.33. 1971.

Voigt (1845) records this form as cultivated in India.

Additional citations: AROE ISLANDS: Kobroör: Buwalda 5103 (N).

CALLICARPA LONGIPES Dunn

Additional bibliography: Moldenke, Phytologia 21: 208, 387, 449, 452, 481, 483, 484, 489, & 491. 1971; Anon., Biol. Abstr. 52 (15): B.A.S.I.C. S.34. 1971; Moldenke, Biol. Abstr. 52: 8221. 1971.

Thanks to the kindness of Miss Mary Liu, I can now report the Chinese-character citations given by Chang (1951) for this species as: Fukien: C. S. Chung 3370. Kiangsi: S. C. Liu 3927 & 4729; H. M. Mo 21185 & 21320. Kwangtung: H. Y. Chen 5689, 5777, 5884, 7059, & 8666; Liang & Huang 31621; L. S. Chen 43103; S. C. Liu 25151; Y. H. Tang 962; L. Teng 95; H. T. Tseng 12008 & 25319.

CALLICARPA LONGIPETIOLATA Merr.

Additional & emended bibliography: E. D. Merr., Philip. Bur. Govt. Lab. Bull. 29: 47--48 & 58. 1905; Moldenke, Phytologia 21: 336 (1971) and 22: 20. 1971.

CALLICARPA LONGIPETIOLATA var. GLABRESCENS Moldenke

Additional bibliography: Moldenke, Phytologia 21: 209--210 (1971) and 22: 20. 1971.

CALLICARPA LONGISSIMA (Hemsl.) Merr.

Additional synonymy: Callicarpa taiwaniana Suzuki, in herb.

Additional bibliography: Moldenke, Phytologia 21: 445, 447, 468, 472, & 473 (1971) and 22: 26. 1971.

Chou found this plant in bloom in September.

According to Miss Mary Liu, the Chinese-character citations given for this species by Chang (1951) are: CHINA: Fukien: P. C. Chung 15. Kwangsi: S. C. Chen 4084; J. C. Chin 6996 & 7738; T. S. Chung 84765 & 84994; S. C. Hsin 1801 & 20015; C. Huang 29033; S. P. Kao 55338; Herb. Kwangsi Mus. 774; Kwangsi Cent. Herb. 94152; H. T. Tseng 22628, 23063, 24001, & 26827. Kwangtung: H. T. Chang 4752; H. Y. Chen 6922 & 7680; E. Chiang 1785; W. Chen 9903; E. Chiang 13591; C. Huang 30204, 30946, & 37772; C. P. Liu 143 & 365; S. C. Liu 25112; T. S. Liu 60; L. Teng 61 & 9942; C. L. Tso 22350. Szechuan: W. P. Fang 5826. HONGKONG: H. Green s.n. [Kwangtung Cent. Herb. 1171]. CHINESE COASTAL ISLANDS: Hainan: K. C. Huh 72465 & 72815; S. C. Liu 27187 & 28236; H. T. Tseng 810 & 16309.

Additional citations: CHINA: Fukien: Chou 49 (Mi).

CALLICARPA MACROPHYLLA Vahl

Additional & emended synonymy: Callicarpa macrophylla Roxb. ex Voigt, Hort. Suburb. Calc. 467. 1845. Callicarpus sp. Jones ex C. B. Clarke in Hook. f., Fl. Brit. India 4: 568, in syn. 1885.

Additional bibliography: W. Jones, Asiat. Research. 4: 255--256. 1799; Wall., Numer. List 87. 1831; Voigt, Hort. Suburb. Calc. 467. 1845; Uniyal & Issar, Journ. Res. Indian Med. 4 (1): 8385. 1969; Farnsworth, Pharmacog. Titles 6 (6): iv & F.11032. 1971; Moldenke, Phytologia 21: 447, 449--451, 456, 461, & 492 (1971) and 22: 27 & 28. 1971; Farnsworth, Pharmacog. Titles 5, Cumul. Gen. Ind. sub Callicarpa. 1971.

Jones (1799) rejects the Linnean system of plant nomenclature and proposes the alternative system of one-word native names -- for the present species he proposes "Mashandari" as the accepted name, with "bastra" and "Callicarpus sp." as synonyms. He also refers here to "American callicarpus" and "hoary callicarpus", but if intended as synonyms or not is not clear. He cites "Retz. 5: 1, no. 19".

According to Miss Mary Liu, the Chinese-character citations given for this species by Chang (1951) are: Kwangsi: J. C. Chin

5717 & 6374; Kwangsi Cent. Herb. 96332. Kwangtung: H. T. Chang 4736; H. Y. Chen 9576. Kweichow: S. W. Teng 90752 & 90986. Yunnan: H. T. Chang s.n. [Yunnan Cent. Herb. 155947]; H. T. Tsai 53291 & 60639.

CALLICARPA MAGNIFOLIA Merr.

Additional bibliography: Moldenke, *Phytologia* 21: 228--229 & 384. 1971.

CALLICARPA MAINGAYI King & Gamble

Additional bibliography: Moldenke, *Phytologia* 21: 448. 1971; Farnsworth, *Pharmacog. Titles* 7 (7): iii & title 12973. 1971; Nishino & al., *Tetrahedron Lett.* 1971 (19): 1541--1544. 1971.

Nishino and his associates (1971) describe maingayic acid, a piscicidal constituent, from this plant.

CALLICARPA MERRILLII Moldenke

Additional bibliography: Moldenke, *Phytologia* 21: 336--337 & 452 (1971) and 22: 23. 1971.

CALLICARPA MICRANTHA Vidal

Additional bibliography: Moldenke, *Phytologia* 21: 235--237 & 452. 1971.

CALLICARPA MOLLIS Sieb. & Zucc.

Additional bibliography: Moldenke, *Phytologia* 21: 337--339, 382, 454, & 497--500 (1971) and 22: 28. 1971.

Crevost & Pételot (1934) record the Chinese name, "bạch đường tử thụ", for this species.

CALLICARPA NUDIFLORA Hook. & Arn.

Additional bibliography: Voigt, *Hort. Suburb. Calc.* 467. 1845; Moldenke, *Phytologia* 21: 329, 341--347, 453, 461, & 488. 1971.

Voigt (1845) reports this species as cultivated in India.

Thanks to the kindness of Miss Mary Liu, I am now able to report the Chinese-character citations given by Chang (1951) for this species as: CHINA: Kwangsi: S. J. Liang 67201, 69899, & 70134; H. H. Su 69122; H. T. Tseng 21842. Kwangtung: L. S. Chen 41422; E. Chiang 872; C. Huang 31232 & 38863; C. C. Huang 499 & 1835; Y. Li 9649; E. H. Tang 1560 & 1720; Y. S. Yuen 100. HONG-KONG: H. Y. Chen 3155, 6848, 6958, & 23679; Green s.n. [Kwangtung Cent. Herb. 1178]; H. T. Tseng 16596. CHINESE COASTAL ISLANDS: Hainan: C. Fong 20276; S. J. Liang 62117, 62473, 63254, 63303, & 66369; S. C. Liu 1929, 5287, 27043, & 27748; H. T. Tseng 29; Tseng & Fong 461; Tso & Chen 44714; K. C. Huh 72814 & 72947.

CALLICARPA OSHIMENSIS Hayata

Additional bibliography: Moldenke, *Phytologia* 21: 379--383, 497, & 500. 1971.

CALLICARPA OSHIMENSIS var. OKINAWENSIS (Nakai) Hatus.

Additional bibliography: Moldenke, Phytologia 21: 380--383 & 500. 1971.

CALLICARPA PARVIFOLIA Hook. & Arn.

Additional bibliography: Moldenke, Phytologia 21: 384--386, 470, & 472. 1971.

CALLICARPA PEDUNCULATA R. Br.

Additional bibliography: Wall., Numer. List 87. 1831; Voigt, Hort. Suburb. Calc. 467 & 473. 1845; Holthuis & Lam, Blumea 5: 111 & 120. 1942; H. J. Lam, Blumea 5: 767. 1945; Moldenke, Phytologia 21: 448--457, 461, 469, 480, 483, 484, 491, & 492 (1971) and 22: 14, 16, & 28. 1971.

Voigt (1845) records this species as cultivated in India, while Holthuis & Lam (1942) record it from Nenoesa island in the Talauds.

The C. B. Robinson 299 specimens cited in Phytologia 21: 454 (1971) by mistake should be deleted since they represent C. caudata Maxim.

Thanks to the kindness of Miss Mary Liu, I am now able to record the Chinese-character citations given for this species by Chang (1951): CHINA: Chekiang: Chekiang Cent. Herb. 43949; J. C. Chin 1838; Shipu & Chin 14128. Fukien: P. C. Chung 37, 312, & 727; S. H. Chung 1204, 2677, & 3021; Dunn s.n. [Hongkong Herb. 3391]; E. Lin 264; S. K. Tang 97 & 435. Kiangsi: S. C. Liu 3924 & 4469; H. M. Mo 20874. Kwangsi: S. C. Chen 4209; H. Meng 8755; H. T. Tseng 21989, 22982, 23820, 24642, 26530, & 26548. Kwangtung: L. S. Chen 40911 & 42765; H. Y. Chen 5707, 5715, & 7555; S. C. Chen 48, 1438, & 1663; E. Chiang 1342, 2158, & 3592; S. C. Hsin 9804; H. H. Hsu 1031; C. Huang 32250; S. P. Kao 50349; P. H. Liang 84356; S. J. Liang 60577 & 61256; S. P. Kuo 80628; Ong & Liu 696, 2047, 23993, & 24455; E. H. Tang 650 & 1032; H. T. Tseng 12008, 20496, 25228, 25596, 25924, 26381, 26419, 28715, & 29947; Tseng & Huang 2434 & 2821; C. L. Tso 20315; Tutcher s.n. [Hongkong Herb. 10799]. HONGKONG: H. Y. Chen 4874, 4960, & 5147; L. S. Chen 40774; E. Chiang 347. CHINESE COASTAL ISLANDS: Hainan: C. Huang 23688; S. C. Liu 96, 5801, & 6029; H. T. Tseng 850, 2706, 5002, 25696, & 27690; Tso & Chen 44757. FORMOSA: Bosizan s.n.; Mori s.n. [Taiwan Cent. Herb. 75765]; Shimada s.n. [Herb. Taiwan Univ. 10988]; Taikow s.n. [Taiwan Cent. Herb. 92772 & 151891]; Taiwan Cent. Herb. 72750.

CALLICARPA PILOSISIMA Maxim.

Additional bibliography: Moldenke, Phytologia 21: 451, 452, 454, 459--462, & 488. 1971.

According to Miss Mary Liu, the Chinese-character citation given for this species by Chang (1951) is: FORMOSA: Tanaka & Shimada s.n. [Herb. Taiwan Univ. 13419].

CALLICARPA PLATYPHYLLA Merr., Philip. Journ. Sci. Bot. 13: 57--58. 1918.

Additional bibliography: Moldenke, Phytologia 21: 462--463. 1971.

This binomial was erroneously cited to Merr., Philip. Bur. Govt. Lab. Bull. 29: 57--58 (1905) by me in a previous installment of this series of notes. It was not actually published until 1918. Merrill (1923) cites Velasco s.n. [Herb. Philip. Forest Bur. 26967], Curran s.n. [Herb. Philip Forest Bur. 17181], and Ramos s.n. [Herb. Philip. Forest Bur. 13903], all from Luzon, Philippine Islands, where he says that the species is endemic.

CALLICARPA PLUMOSA Quisumb. & Merr.

Additional bibliography: Moldenke, Phytologia 21: 463--464. 1971.

Merrill (1928) describes the calyx of this species as being "1.5 to 1.75 cm in diameter" -- but surely this is a typographic error for "mm." instead of "cm." since the corollas are described as being only 3.5--3.75 mm. long. Here is another of many examples of the confusion that can be caused by use of the metric system's abbreviations.

CALLICARPA POILANEI Dop

Additional bibliography: Moldenke, Phytologia 21: 444 & 464--465. 1971.

CALLICARPA PRINGLEI Briq.

Additional bibliography: Moldenke, Phytologia 21: 465--467. 1971.

The J. Rzedowski 10689a specimen in the University of Michigan herbarium has been re-examined by me and still seems to me to be placed best in C. pringlei Briq., in spite of the fact that other specimens of this collection have been cited as C. acuminata H.B. K. It is very probable that C. pringlei is merely a variety or form of C. acuminata.

CALLICARPA PSILOCALYX C. B. Clarke

Additional bibliography: Moldenke, Phytologia 21: 452 & 468--469. 1971.

CALLICARPA RESINOSA Wright & Moldenke

Additional bibliography: Moldenke, Phytologia 21: 475. 1971.

According to Alain Liogier and also according to Underwood, Bull. Torrey Bot. Club 32: 291--300 (1905), the "San Juan de Buenavista" of Charles Wright is definitely in Oriente, Cuba, not in Pinar del Río as previously suggested by Carabia.

CALLICARPA RETICULATA Sw.

Additional bibliography: Voigt, Hort. Suburb. Calc. 473. 1845; Moldenke, Phytologia 21: 475--477. 1971.

CALLICARPA RUBELLA Lindl.

Additional bibliography: Voigt, Hort. Suburb. Calc. 473. 1845; R. E. & C. R. Harrison, Trees & Shrubs 39, pl. 93. 1965; Coats, Pl. Hunters 101. 1969; Moldenke, Phytologia 21: 449, 451—454, 461, 467, & 480—492 (1971) and 22: 13. 1971.

Additional illustrations: R. E. & C. R. Harrison, Trees & Shrubs pl. 93 [in color]. 1965.

According to the Harrisons (1965) "For some years this half-hardy deciduous species was wrongly distributed in Australia and New Zealand under the name *C. dichotoma*, which is a similar but much hardier species. Lilac-purple berries [actually, drupes!] appear in late autumn and winter."

Thanks to the kindness of Miss Mary Liu, I am now able to record the Chinese-character citations given for this species by Chang (1951) as: CHINA: Hunan: S. C. Chen 1857 & 2581; H. T. Chang 4560; Cheng, Chu, & Chang 10144; K. C. Ho 1159, 1428, & 1623; S. C. Hsin 982; L. J. Li 276; P. H. Liang 519; P. C. Yeh 253. Kiangsi: E. Chiang 10159; H. M. Mo 21151. Kwangsi: J. C. Chin 5681, 5922, & 7189; S. C. Hsin 342, 634, 1716, 1736, 21428, 21623, 22213, 22429, 22436, 23133, & 25271; C. Huang 39374, 40586, & 40762; S. K. Li 81064; S. J. Liang 69482 & 69589; S. K. Li 81055 & 81086; S. J. Liang 66907; S. C. Liu 28507 & 28769; H. H. Su 68813; H. T. Tseng 22497, 22744, 22953, 23346, 26521, 26700, 27598, & 27922; C. L. Tso 23653; C. R. Wang 150. Kwangtung: H. T. Chang 44 & 4373; S. C. Chen 1686, 1797, & 5633; L. S. Chen 41181; Y. H. Chen 7049; E. Chiang 744, 772, 870, & 1155; Herb. Kwangtung Cent. Univ. 153539; S. C. Hsin 10020; C. Huang 30716, 31283, 32474, 37864, & 38433; S. P. Kao 52608 & 52877; P. H. Liang 84219, 84512, & 84605; S. J. Liang 61865; T. Lin 9585; Herb. Kwangtung Cent. Herb. 67887; S. C. Liu 23959; McClure s.n. [Herb. Lingnan Univ. 6968]; H. T. Tseng 20762, 21319, & 25640; C. L. Tso 20752, 22030, & 22323. Kweichow: E. Chiang 5315. Sikiang: W. P. Fang 6030. Szechuan: W. P. Fang 1272, 1636, 6286, & 7821. Yunnan: H. T. Tsai 54215, 60238, 60479, 61437, & 62224; Wang, Kao, & Liu 100060. HONGKONG: H. Y. Chen 6544 & 6551; L. S. Chen 41842. CHINESE COASTAL ISLANDS: Hainan: Tso & Chen 43351.

CALLICARPA RUBELLA var. DIELSII (Léveillé) Li

Additional bibliography: Moldenke, Phytologia 21: 489—490. 1971.

According to Miss Mary Liu, the Chinese-character citations given for this variety by Chang (1951) are: Chekiang: J. C. Chin 1760. Hunan: H. T. Chang 4456. Kwangsi: C. Huang 40371.

CALLICARPA RUBELLA var. HEMSLEYANA Diels

Additional bibliography: Moldenke, Phytologia 21: 454, 484, & 487—492. 1971.

CALLICARPA RUBELLA f. ROBUSTA P'ei

Additional bibliography: Moldenke, *Phytologia* 21: 452, 453, & 492. 1971.

CALLICARPA SACCATA Steen.

Additional bibliography: Moldenke, *Phytologia* 21: 493--495 (1971) and 22: 23. 1971.

CALLICARPA TOMENTOSA (L.) Murr.

Additional bibliography: Moldenke, *Phytologia* 22: 131--136. 1971.

Watt (1889) informs us that the bark of this species has a peculiar aromatic taste "and may probably be found to have other medicinal virtues. The Malays consider the plant as a diuretic. Drury mentions that in Upper Hindustan the root is employed in cutaneous affections. Dr. Trimen writes to the author that in Ceylon 'the leaves, roots, and bark are used locally by the natives for skin diseases; they are very bitter'...The bark, which is sub-aromatic and slightly bitter to taste, is chewed by the Singhalese instead of betel leaves."

Common and vernacular names recorded for the species include "aisar", "ambong-ambong bukit", "ambong-ambong puteh", "aroosha fibre" [the product], "bastra", "bastra coat comul", "bharngi", "cheruthekku", "derlap dapur", "eela-gas", "eella", "Filzbaum", "filzichte Wirbelbeere", "folhas de raspa macho", "groot rijfblad", "guenla", "hu kwai", "hū kwai", "illa", "ishwar", "kata kēran", "kepayang", "kēpayang", "khalema", "massandari", "nai-kumbil", "sitapoeeng", "sitapueng", "sitapuēng", "tamah kērbau", "tēpong-tēpong", "teregam", "thin perivellam", "thin-perivellam", "tindjaoe", "tinjau", "tondi", "tondi karavatti", "tondi teragam", "tondi-teragam", "vettilai patta", "vettileipatta", "wákhora", "Wollbaum", "wollige Schönbeere", "wollige schonheere", "wollige Wirbelbeere", and "yesar".

It is worth recording here the original descriptions of some of the names involved in the synonymy of this species. For instance, Linnaeus (1747, 1749) describes Arbor malabarica Illa dicta as "Arbor inter omnes ramis, petiolis, pedunculis & foliis maxime tomentosa & crasso panno quasi obvoluta. Folia ovata, magna, acuminata, integerrima, opposita, petiolata, supranuda. Callicarpae affinis, sed distincta petalis quatuor, & staminibus receptaculo insertis." He originally described (1767) Tomex tomentosa as "fol. integerrimis lanatis". His original description of Callicarpa lanata (1767) was "Tomex tomentos. Hoc genus potest intrare genus Callicarpae, et haec lanata CALLICARPA foliis integerrimis lanatis nominati." Wallich (1820) amplified this to read: "A pretty large tree, a native of the Circar mountains, and of the vallies between them. Trunk perfectly straight and of considerable height. Bark smooth ash-colored. Branches few and near the top, forming a small head for so large a trunk. Young shoots somewhat four-sided and covered with a grey farina. Bractes small. -- Flowers very numerous, small, purple. -- Calyx short; border four-sulcated, permanent. -- Corol. tube bent to one side. The other parts as in the genus. -- Style descending.

Obs. The wood of this tree is white, spongy, and of course not fit for much use."

The original description of Tondi teregam by Rheede tot Drakestein (1683) is as follows and is accompanied by an excellent drawing: "Arbor haec Malabarensibus Tondi Teregam, Brachmanis Tondi Karavatti, Lusitanis Folhas de raspa Macho, Belgis Groot Rijn-blad appellatur; Estque procera, sexaginta circiter pedes alta, caudice crasso, ramulis rectis, longis, atro-viridibus, lanuginosis, asperis, fungosâ intus medulla refertis, plurimis donato; lignum albicans, nigricante cortice cinctum. Radix fibrata, albicans, lactescens, rufo, intus croceo cortice tecta, inodora, saporis acris. Folia geminata ordine parallelo petiolis longis circa ramulosveniunt, oblongo-rotunda, acuminata, in ambitu crenata, crassa, mollia, glabra, supernè viridia, & nitentia, infernè subviridia & lanuginosa, nervis aliquot è costâ mediâ crassâ, in adversa parte extuberante & lanuginosâ, in latere excurrentibus; odor suavis, sapor. aromaticus. Flosculi pediculis oblongis ex foliorum interna sede circa ramulosveniunt, terni, aut plures simul congesti, purpurei, manibus confrecti sueveolentes, calycique viridi, lanuginoso, ac quadripartito inhaerent, quatuor acuminatis foliolis constantes; foliola haec intercedunt totidem staminula purpurascantia, medium occupante stylo pulchrè rubente, capitulo albicante. Fructus hanc arborem nullo ferè Malabarenses testantur. Crescit locis arenosis & petrosis in Mangatti; semper vivet, Julio & Augusto mensibus flores fert, diuque superstes manet. Porro ex arboris foliis in lactis sero coctis fit oris collutio pro Aphthis. E cortice, & Radice in aqua decoctis Apozema conficitur, quod aestum febrilem temperat, hepatis ostruções reserat, nec non herpeti, scabiei, similibusque affectibus medetur."

Hosséus (1911) describes the flowers as violet and the leaves as "dunkelgrüne Blattoberseite, graufilzige Blattunterseite", citing Hosséus 613, and giving the overall distribution of the species as "Indien, Siam".

Lam (1919) describes his C. lanata var. typica as "folia sub-tense tomentosa, chartacea vel subcoriacea; calyx dense stellato-puberulus", as compared with his var. psilocalyx "folia membranacea, subtus densiuscule tomentosa, vel subglabrata; calyx glaber vel nonnullis pilis vestitus".

The binomial, Callicarpa integrifolia, listed by me in the synonymy of this species, is a puzzling one. Its original publication by Retzius (1789) reads merely "C. integrifolia Syst. Nat. Ed. X. forte est Callicarpa tomentosa, quae in Mant. alt. p. 333. lanata dicitur." I have not been able to find the binomial mentioned anywhere in the tenth edition of the Systema Naturae of Linnaeus (1759), although "Tomex tomentos." occurs there on page 897.

Callicarpa coja, based on Herb. Wallich 1826 K, collected by Hamilton at "Gualpara" in Assam, probably belongs here, as also C. gongalo, based on Herb. Wallich 1826 J, collected by Hamilton at Sirpur in the Morung Hills of eastern Nepal. Neither of these bi-

nomials is listed in the "Index Kewensis", nor in C. B. Clarke's treatment of the genus in Hooker's "Flora of British India", but from Wallich's disposition of the names it would appear rather clear that he regarded them in this fashion.

It is well worth noting here that under Genus 136, Callicarpa, in the Linnean Herbarium, sheet number 2 is inscribed "tomentosa" in Linnaeus' own handwriting and "cana" in the handwriting of Solander. The specimen is neither C. tomentosa nor C. candicans (Burm. f.) Hochr. [as we now denominate what used to be known as C. cana L.], but actually is C. nudiflora Hook. & Arn. Sheet number 3, unidentified, is actually C. candicans. Jackson (1912) also affirms that there is a specimen in the Linnean Herbarium named as C. tomentosa by Linnaeus, but none identified as C. lanata by him.

King & Gamble (1908, 1909) compare their C. arborea var. villosa (Roxb.) King & Gamble with what is now known as C. tomentosa as follows: "The var. resembles C. lanata Linn., of Southern India and Ceylon in its leaves, but the flowers are those of C. arborea!" I regard their variety as typical C. arborea Roxb.

Aganon umbellata Raf., sometimes listed as a synonym of Callicarpa tomentosa, appears to be something non-verbenaceous.

Sprengel (1825) reduces C. tomentosa L. to synonymy under what he calls C. cana L. [now known as C. candicans (Burm. f.) Hochr.] and regards C. lanata L. as a valid species with C. pedunculata R. Br., C. incana Roxb., and C. dentata Roth as synonyms. I regard C. incana Roxb. as a synonym of C. macrophylla Vahl and C. dentata Roth as a synonym of a valid C. pedunculata R. Br. Steudel (1840) reverses the situation and reduces C. lanata L. to synonymy under what he regards as a valid C. dentata Roth. Balfour (1885) lists C. cana L., C. tomentosa L., and C. americana Lour. as synonyms of what he calls C. lanata L.

Merrill (1917) notes that "Schauer has reduced Callicarpa cuspidata Roxb., which was very briefly described by Roxburgh from specimens originating in the Moluccas (probably Amboina), to the Indian Callicarpa lanata Linn. = Callicarpa tomentosa (Linn.) Murr., in which he is certainly in error. Nor is the Australian Callicarpa pedunculata R. Br., which Schauer cites as a synonym, properly placed, as it is very distinct from both Callicarpa tomentosa (Linn.) Murr. and C. cuspidata Roxb." I regard C. cuspidata Roxb. as the same as C. pedunculata R. Br.

Bakhuizen van den Brink (1921) regarded C. lobata C. B. Clarke, from Nepal, as "[?] C. tomentosae [L.] Murr. forma." He actually includes under C. tomentosa such diverse taxa as C. arborea Roxb. [which I regard as a valid species], C. integerrima Champ. [also a valid species], C. longipetiolata Merr. [a valid species], C. magna Schau. [actually C. arborea var. psilocalyx (H. J. Lam) Moldenke], etc.

[to be continued]